

**Amendments to the Claims**

This listing of claims will replace all prior version, and listings, of claims in the application.

**Listing of Claims:**

1. (currently amended) A method for providing access control in a protocol stack, comprising the steps of:

- (a) receiving a request to perform an operation at a layer of a plurality of layers of the same protocol stack;
- (b) calling an access mediator;
- (c) determining if the request is to be granted based upon a predetermined security policy by the access mediator;
- (d) providing the determination by the access mediator; and
- (e) allowing the operation to be performed at the layer if the determination is to grant the request, wherein access control is provided between the layer and another layer of the same protocol stack.

2. (original) The method of claim 1, wherein the receiving step (a) comprises:

- (a1) receiving the request by the layer to perform the operation on an object by a subject at the layer of the protocol stack.

3. (original) The method of claim 1, wherein the calling step (b) comprises:

- (b1) calling the access mediator by the layer.

4. (original) The method of claim 1, wherein the providing step (d) comprises:

(d1) returning the determination by the access mediator to the layer.

5. (original) The method of claim 1, wherein the receiving step (a) comprises:

(a1) receiving the request by a layer manager to perform the operation on an object by a subject at the layer of the protocol stack.

6. (original) The method of claim 5, wherein the layer manager interfaces with each layer of the protocol stack, wherein the layer manager handles data flow to each layer of the protocol stack.

7. (original) The method of claim 1, wherein the calling step (b) comprises:

(b1) calling the access mediator by a layer manager.

8. (original) The method of claim 7, wherein the access mediator is implemented in the layer manager.

9. (original) The method of claim 1, wherein the providing step (d) comprises:

(d1) returning the determination by the access mediator to a layer manager.

10. (original) The method of claim 1, wherein the calling step (b) further comprises:

(b1) passing a subject's identity, an object's identity, and a requested operation to the access mediator.

11. (canceled)

12. (currently amended) The method of claim 1, further comprising:

(e f) blocking the operation if the determination is to not grant the request.

13. (currently amended) A method for providing access control in a protocol stack, comprising the steps of:

- (a) receiving a request by a layer of a plurality of layers of the protocol stack to perform an operation at the layer;
- (b) calling an access mediator by the layer;
- (c) determining if the request is to be granted based upon a predetermined security policy by the access mediator; and
- (d) providing the determination by the access mediator to the layer; and
- (e) allowing the operation to be performed at the layer if the determination is to grant the request, wherein access control is provided between the layer and another layer of the same protocol stack.

14. (currently amended) A method for providing access control in a protocol stack, comprising the steps of:

- (a) receiving a request by a layer manager to perform an operation at a layer of a plurality of layers of the same protocol stack;
- (b) calling an access mediator by the layer manager;
- (c) determining if the request is to be granted based upon a predetermined security policy by the access mediator;
- (d) providing the determination by the access mediator to the layer manager; and

(e) allowing the operation to be performed at the layer if the determination is to grant the request, wherein access control is provided between the layer and another layer of the same protocol stack.

15. (currently amended) A system, comprising:  
a plurality of layers of a protocol stack; and  
an access mediator, wherein each layer of the same protocol stack may call the access mediator to determine if a request to perform an operation at a layer of the protocol stack is to be granted, wherein access control is provided by the access mediator between the layer and another layer of the same protocol stack.

16. (currently amended) A system, comprising:  
a plurality of layers of a protocol stack; and  
a layer manager, wherein the layer manager is interfaced with each of the plurality of stack components, wherein the layer manager comprises an access mediator, wherein layer manager may call the access mediator to determine if a request to perform an operation at a layer of the protocol stack is to be granted, wherein access control is provided by the access mediator between the layer and another layer of the same protocol stack.

17. (currently amended) A computer readable medium with program instructions for providing access control in a protocol stack, comprising the steps of:

(a) receiving a request to perform an operation at a layer of a plurality of layers of the same protocol stack;

(b) calling an access mediator;

- (c) determining if the request is to be granted based upon a predetermined security policy by the access mediator; ~~and~~
- (d) providing the determination by the access mediator; and
- (e) allowing the operation to be performed at the layer if the determination is to grant the request, wherein access control is provided between the layer and another layer of the same protocol stack.